REMARKS

Reconsideration of the application is requested.

Claims 1-2 and 4-13 are now in the application. Claims 1-2 and 4-13 are subject to examination. Claims 1, 4 and 5 have been amended. Claims 10-13 have been added. Claim 3 has been canceled.

Under the heading "Claim Rejections - 35 USC § 102" on pages 2-3 of the above-identified Office Action, claims 1, 2 and 4-6 have been rejected as being fully anticipated by U.S. Patent No. 5,386,435 to Cooper et al. (hereinafter Cooper) under 35 U.S.C. § 102.

In view of the Examiner's statement that claim 3 is allowable, claim 1 has been amended with the features of allowable claim 3. Claim 3 has been canceled.

Under the heading "Claim Rejections - 35 USC § 103" on pages 3 and 4 of the above-identified Office Action, claims 7-9 have been rejected as being obvious over Cooper under 35 U.S.C. § 103. Claims 7-9 ultimately depend from amended claim 1 which is believed to be allowable and therefore claims 7-9 are also believed to be allowable.

It is noted that claim 4 has been put in independent form with two minor changes. The recitation of "subfrequency sequences" has been changed to "frequency subsequences" as the invention relates to a sequence being subdivided into subsequences and not to a frequency being subdivided into subfrequencies. In addition, the term "identification signal" was replace by "message". Support for the change is found on page 10, lines 21-24 of the specification.

Independent claim 4 is believed to be allowable for the now described reasons.

Claim 4 of the instant application relates to frequency-synchronization in a wireless communication system. Within the communication system a mobile unit and a base station are communicating over a defined number of frequencies. During communication the transmission frequency is changed according to a selected frequency sequence out of plurality of frequency sequences. The base station transmits a message that contains an identification code identifying the base station. A key is derived from the identification code, with the actual frequency sequence being assigned to the key.

Further each frequency sequence is subdivided into several different, unique frequency subsequences. The subsequences

are specified by subkeys, which are derived from the transmitted message.

Thus, the mobile unit determines the key from the identification code, which defines the actual frequency sequence. As the actual frequency sequence itself is subdivided into a plurality of frequency subsequences, the actual frequency subsequence within the actual frequency sequence is determined by the subkey that is derived from the transmitted message.

In contrast, Cooper teaches a method for frequency - synchronization in a frequency-hopping based wireless communication system. For frequency-hopping a plurality of alternative frequency hopping sequences is provided. A base station transmits a base station address BASEADD within a time mark frame, with the base station address BASEADD identifying the actual frequency hopping sequence (see column 7, lines 25 to 36). The actual frequency hopping sequence is defined by two parameters: the sequence number and the sub-table number. Both, the sequence number and the sub-table number, are derived from the base station address BASEADD (see column 20, lines 36 to 38). The sequence number itself is related to a number X which is a parameter of the recursive generator formula Zi+1 = (XZi) MOD Y for

calculating the logical channels numbers Zi of the actual hopping sequence (see column 18, line 64). The generator formula generates a hopping sequence of logical channel numbers Zi in the range 1 to Y-1=52, with the total number of logical channels being 52. Regarding the parameter X, 12 different values are selectable.

Since the total number of physical channels that are available for transmission is 65 and thus higher than the number of logical channels, 52 out of 65 physical channels are mapped to 52 logical channels. This mapping is accomplished via a table (see column 19, lines 57 to 64) which contains 5 sub-tables, with a particular sub-table being selected via the sub-table number (see above). Each sub-table assigns a particular plurality of 52 physical channels out of 65 physical channels to 52 logical channels. The first sub-table assigns the physical channels 1 to 52 to the logical channels 1 to 52; the second sub-table assigns the physical channels 14 to 65 to the logical channels 1 to 52; the third sub-table assigns the physical channels 27 to 65 and 1 to 13 to the logical channels 1 to 52 and so forth.

Since 5 different options for mapping the physical channels to logic channels and 12 different logical channel-related sequences are available, the total number of frequency sequences is 60 (see

column 20, 17 to 25).

Thus, the inventive method according to claim 4 of the instant application differs from the teachings in Cooper in such a way that according to the invention of the instant application each frequency hopping sequence is subdivided into a pluraiity of subsequences, with the current subsequence being identifiable via the particular subkey. In Cooper a selectable subset (52 channels) of the available physical channels (65 channels) is mapped to a number of logical channels (52 channels). It should be noted that there is no connection between the selectable subset of physical channels according to Cooper and the subsequences according to the invention of the instant application. In addition, the mapping and the calculation of the hopping sequence in Cooper are controlled via the base station address BASEADDR, which is a fixed number and thus not usable for the identification of a current subsequence. Thus, in Cooper none of the frequency hopping sequences is subdivided into subsequences nor is a subkey (in addition to a key for identifying the sequence), which identifies the current subsequence, transmitted.

Since the concepts of subdividing a hopping sequence into subsequences and of identifying the current subsequence via a

subkey are not proposed in Cooper nor rendered obvious to a person of average skill in the art with the knowledge of Cooper, claim 4 of the instant application is believed to be novel and recites an inventive step.

New claims 10-13 have been added. Claims 10-11 are copies of claims 8-9 but now depend from claim 4. Claim 12 is a combination of amended claim 1 and original claim 8, claim 13 is a combination of amended claim 4 and original claim 8.

Please find enclosed a credit card authorization for $200.00 for the addition independent claim in excess of three.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1, 4, 12 or 13. Claims 1, 4, 12 and 13 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claim 1 or 4.

In view of the foregoing, reconsideration and allowance of claims 1-2 and 4-13 are solicited.

If an extension of time is required, petition for extension is herewith made. Any extension fee associated therewith should be charged to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

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REL:cgm

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